

***Unit Strategic Fire Plan
Lassen-Modoc-Plumas***



Last update: May 1, 2013

UNIT STRATEGIC FIRE PLAN AMENDMENTS

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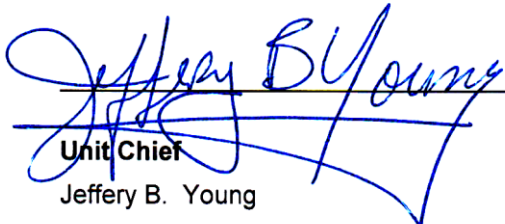
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SIGNATURE PAGE

Unit Strategic Fire Plan developed for Lassen-Modoc-Plumas Unit:

This Plan:

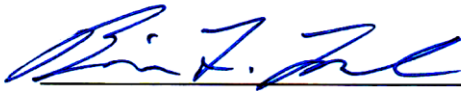
- Was collaboratively developed. Interested parties, Federal, State, City, and County agencies within the Unit have been consulted and are listed in the plan.
- Identifies and prioritizes pre fire and post fire management strategies and tactics meant to reduce the loss of values at risk within the Unit.
- Is intended for use as a planning and assessment tool only. It is the responsibility of those implementing the projects to ensure that all environmental compliance and permitting processes are met as necessary.



Unit Chief
Jeffery B. Young

May 1, 2013

Date



Prevention Bureau Chief
Brian Layne

May 1, 2013

Date

EXECUTIVE SUMMARY

The Lassen Modoc Plumas Unit includes Lassen, Modoc and Plumas Counties and portions of Shasta and Siskiyou Counties. The Unit's Fire Management Plan is intended to provide information to CAL FIRE personnel, various County Boards of Supervisors, Fire Safe Councils and other stakeholders focused on identifying specific problem areas and solving the mutually agreed upon fire issues.

The Lassen Modoc Plumas Unit Fire Management Plan documents the assessment of the fire situation in the Unit. It includes stakeholder contributions and priorities which identify strategic targets for proactive approaches and project based solutions.

While the Unit Fire Management Plan addresses local needs, the State Board of Forestry and Fire Protection also has legislative mandates dating back to 1945 requiring it to determine the "intensity" or appropriate level of fire protection for all state responsibility areas in California (*Public Resources Code §4130*). The Unit Fire Management Plan is the means of focusing efforts on local needs while working within the framework of the California Fire Plan as adopted by the Board of Forestry and Fire Protection.

It is intended to be an ever-evolving working document which can be used to identify potentially hazardous areas or communities at risk, provide guidelines for fire prevention and protection projects and to assist the Fire Safe Councils and community groups with useful information in making their communities fire safe. This document should be used as a guide that can be amended over the years as necessary and as the basic framework for fire prevention projects within the Lassen Modoc Plumas Unit.

The *California Fire Plan (2010)* is outlined within this document. It is the goal of the Unit to apply the California Fire Plan to accomplish a systematic assessment of the fire problem. Through this assessment, the Unit strives to develop "fire safe" communities and reduce the potential occurrence of devastating wildfires. In an effort to implement the California Fire Plan, the Lassen Modoc Plumas Unit utilizes computer-based data and Geographic Information System (GIS) to comprehensively analyze fire hazards, assets at risk and the level of service, all of which are included in the Unit Fire Management Plan.

The Lassen Modoc Plumas Unit's Fire Management Plan systematically assesses the existing levels of wildland protection services, identifies high-risk and high value areas that are potential locations for costly and damaging wildfires, ranks the areas in terms of priority needs, and prescribes actions that can be taken to reduce future losses.

SECTION I: UNIT OVERVIEW

UNIT DESCRIPTION

Lassen-Modoc-Plumas Unit is located in the northeastern corner of the State. It consists of Lassen, Modoc, Plumas and portions of Shasta, Sierra and Siskiyou Counties.

The Cascade Mountain Range ends near the Almanor Basin. The Sierra Nevada Range begins and runs to the South along the Diamond Mountains on the Southwest edge of the Honey Lake Valley. The unit encompasses the Northeastern Plateau of California with an average elevation of 5000 feet above sea level.

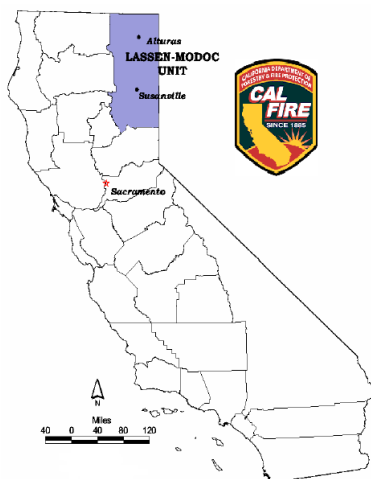
Vegetation types range from mixed conifer, ponderosa and lodge pole pines along the West side of the Unit, to sagebrush, oaks, and annual grasses mixed with juniper in the desert to the East. The Eastern boundary of the Unit is the beginning of the Great Basin, which continues east to the Great Salt Lake of Utah.

The majority of the populated areas are located in the Honey Lake Valley, Lake Almanor Basin, Big Valley and Alturas. The Honey Lake Valley is home to the City of Susanville, and the communities of Janesville, Standish, Litchfield, Wendel, Milford, Herlong, and Doyle.

The Almanor Basin consists of the City of Chester, Almanor, Almanor West, Prattville, Peninsula, Hamilton Branch, Canyon Dam, Clear Creek and Westwood. The Big Valley area includes the communities of Bieber, Nubieber, Lookout, and Adin. The Alturas area consists of the City of Alturas and the towns of Likely, Canby, Cedarville, Davis Creek and the community of Cal Pines.

The majority of fires in the Lassen Modoc Plumas Unit are due to Lightning. See Exhibit C for Unit fire history map.

The recent California's Forests and Rangelands have identified priority landscapes and strategies. The individual priority landscapes can be retrieved from the following website; <http://frap.cdf.ca.gov/assessment2010.html>



A total of 1.6 million acres are within the Direct Protection Area of the Unit.

UNIT PREPAREDNESS AND FIREFIGHTING CAPABILITIES

U.S. Highway 395 runs North to South along the East side of the Unit, from Lakeview, Oregon to Reno, Nevada. State Highways 70, 139, 299, 44 and 36 transect the Unit West to East and State Highway 89 runs North to South along the West side of the Unit traveling through Lassen National Park. Numerous visitors travel these routes throughout the year, as well as interstate commerce from the Sacramento Valley and Oregon in search of a shorter way to the East bound interstate highways.

Logging, correctional institutions and recreation are the major industrial economic factors to the region. Over the past few years, logging has diminished due to environmental concerns and regulations from the Federal and State governments. Although very seasonal, recreation flourishes during the spring and summer months. Watersheds from the Lassen Modoc Plumas Unit flow to the Feather and Sacramento River. Most of these watersheds are the headwaters to these two major rivers in the state.

The Lassen-Modoc-Plumas Unit resources and facilities include:

Susanville Interagency Fire Center
8 Fire Stations,
13 front line fire engines,
2 reserve fire engines,
5 Lookouts,
3 Conservation Camps,
14 Inmate Fire Crews
Susanville Inmate Training Center
3 medium fire bulldozers,
1 medium helicopter with crew.

The Susanville Interagency Fire Center provides emergency dispatch services for all of the Federal, State and local government fire agencies in Lassen County and the Almanor Basin. Plumas County Sheriffs office dispatches local government fire agencies in the remainder of Plumas County. The Modoc County Sheriffs office dispatches the local government fire agencies within Modoc County.

Cooperating government agencies within the Lassen-Modoc-Plumas Unit include:

USDA - Lassen National Forest
USDA - Plumas National Forest
USDA - Modoc National Forest
USDI - Lassen Volcanic National Park
USDI - Lava Beds National Monument
USDI - Bureau of Land Management
USDI - Bureau of Indian Affairs
Natural Resource Conservation Service
California Department of Fish and Game
California Department of Transportation
California Highway Patrol
Department of Defense, Herlong Army Depot
Lassen County Sheriffs Office & Lassen County Office of Emergency Services
Plumas County Sheriffs Office
Modoc County Sheriffs Office

SECTION II: COLLABORATION

COMMUNITY / AGENCIES / FIRE SAFE COUNCILS

Representatives involved in the development of the Unit Strategic Fire Plan are included in the following table. Their organization and title are indicated below:

Plan Development Team:

Organization	Title
Lassen Fire Safe Council	Lassen County FSC Coordinator
Modoc Fire Safe Council	Modoc County FSC Coordinator
Plumas Fire Safe Council	Plumas County FSC Coordinator
Almanor Basin Fire Safe Council	Almanor Basin FSC Coordinator

SECTION III: VALUES

A: VALUES

The primary goal of wildland fire protection in the Lassen-Modoc-Plumas Unit is to safeguard the wide range of assets found within the unit from the effects of wildfire. The assets at risk, both public and private, are to be protected. The following have been identified as assets at risk to wildfires and include both economic and non-economic assets: people, structures, timber, watershed, wildlife, unique scenic and recreation areas, range, and air quality. The table below provides a description of the evaluated assets.

Asset at Risk	Public Issue Category	Location and Ranking Methodology
Hydroelectric power	Public welfare	1) Watersheds that feed into river power plants ranked based on plant capacity; 2) Cells adjacent to reservoir based plants (Low rank); 3) Cells containing canals and flumes (High rank).
Fire-flood watersheds	Public safety Public welfare	Watersheds with a history of problems or potential for future problems, ranked based on downstream Population.
Soil erosion	Environment	Watersheds ranked based on erosion potential
Water storage	Public welfare	Watershed area up to 20 miles upstream from water storage facility, ranked based on water value and dead Storage capacity of facility.
Water supply	Public health	1) Watershed area up to 20 miles upstream from water supply facility (High rank) 2) Grid cells containing domestic water diversions, ranked based on number of connections; 3) Cells containing ditches that contribute to water supply system (High rank)
Scenic	Public welfare	Four mile view-shed around Scenic Highways and ¼ view-shed around Wild and Scenic Rivers, ranked based on potential impacts to vegetation types (tree versus non-tree types)
Timber	Public welfare	Timberlands ranked based on value and susceptibility to damage
Range	Public welfare	Rangeland ranked based on potential replacement feed cost by region/owner and vegetation type.
Air quality	Public health / Public welfare Environment	Potential damages to heath, materials, vegetation, and visibility; ranked based on vegetation type and air basin
Historic buildings	Public welfare	Historic building ranked based on fire susceptibility
Recreation	Public welfare	Unique recreation area or areas with potential damage to facilities, ranked based on fire susceptibility
Structures	Public safety / Public welfare	Ranked based on housing density and fire susceptibility

Asset at Risk	Public Issue Category	Location and Ranking Methodology
Non-game wildlife	Environment Public welfare	Critical habitats and species locations based on input from California Department of Fish and Game and other stakeholders
Game wildlife	Public welfare Environment	Critical habitats and species locations based on input from California Department of Fish and Game and other stakeholders
Infrastructure	Public safety Public welfare	Infrastructure for delivery of emergency and other critical services (e.g. repeater sites, transmission lines)
Ecosystem Health	Environment	Ranking based on vegetation type/fuel characteristics

The assets at risk are evaluated to the 450 acre scale within the Lassen-Modoc-Plumas Unit. This scale has been designated by the Department for purposes of manageability. These 450 acre cells have been designated as Quad 81st. This designation is based on the sectioning of a USGS 7.5 minute quadrangle map broken down into a 9x9 grid pattern; this process results in squares of 450 acres. Fire plan assessments have been made at the Q81st level. For instance, each Q81st in LMU has a ranking applied to it for Level of Service (LOS), Assets at Risk (AAR), fuel hazards, etc.

Each asset is validated by the unit personnel, stakeholders and interested parties, as to the weight and value placed on the Q81 for that asset. Once this process is completed, the LOS calculation is run and the value for that cell is applied, thus giving that cell its weighted value, and producing the aggregated relationship for that area. (For more information regarding the evaluation of asset susceptibility, refer to the California Fire Plan.)

<http://www.fire.ca.gov/FireEmergencyReponse/FirePlan/FirePlan.asp>

The ranking is scaled to the Q81st and transferred to GIS maps. Map overlays will be evaluated by unit staff for identification of the areas with the highest combined asset values and fire risk to be targeted for fire management activities. The scores for the various assets at risk are given a 1 (low) score out of a possible 9.999 (high). Infrastructure, non-game wildlife, and range scores were given a score of 2. Timber was given a 3 and structures were given a 5. Many factors are involved in target area identification, including political climate of the region and suppression cost reductions.

The process of explicitly enumerating assets at risk also helps to identify who benefits from those assets. It is a premise of the California Fire Plan, on which this plan is structured, that those who benefit from the protection of an asset should pay for that protection. The Lassen-Modoc-Plumas Unit personnel will continuously evaluate these assets during planning stages.

B: COMMUNITIES AT RISK

The “Communities at Risk” in Lassen, Modoc and Plumas Counties listed in the following tables, are on the National Registry available at the following site:

[Http://cafirealliance.org/communities_at_risk_a-d.php](http://cafirealliance.org/communities_at_risk_a-d.php)

Communities at risk: Lassen County

Place Name	County Name	Federal Threat	Federally Regulated
Bieber	Lassen	✓	✓
Clear Creek	Lassen		
Doyle	Lassen	✓	✓
Hallelujah Junction	Lassen	✓	✓
Herlong	Lassen	✓	✓
Janesville	Lassen	✓	✓
Johnstonville	Lassen		✓
Levitt	Lassen		✓
Litchfield	Lassen	✓	✓
Little Valley	Lassen	✓	✓
Madeline	Lassen	✓	✓
Milford	Lassen	✓	✓
Nubieber	Lassen		
Pine Town	Lassen		
Ravendale	Lassen	✓	✓
Spaulding	Lassen	✓	✓
Standish	Lassen	✓	✓
Stones Landing	Lassen	✓	✓
Susanville	Lassen	✓	✓
Wendel	Lassen	✓	✓

Communities at Risk: Modoc County

<u>Place Name</u>	<u>County Name</u>	<u>Federal Threat</u>	<u>Federally Regulated</u>
Adin	Modoc	✓	✓
Alturas	Modoc	✓	✓
Cal Pines Lower Units	Modoc	✓	✓
Cal Pines Upper Units	Modoc	✓	✓
Canby	Modoc		✓
Cedarville	Modoc	✓	✓
Copic	Modoc	✓	✓
Davis Creek	Modoc	✓	✓
Day	Modoc	✓	✓
Eagleville	Modoc	✓	✓
Fort Bidwell	Modoc	✓	✓
Likely	Modoc	✓	✓
Lookout	Modoc	✓	✓
New Pine Creek	Modoc	✓	✓
Newell	Modoc	✓	✓
Willow Ranch	Modoc	✓	✓

Communities at risk: Plumas County

<u>Place Name</u>	<u>County Name</u>	<u>Federal Threat</u>	<u>Federally Regulated</u>
Almanor	Plumas	✓	✓
Beckwourth	Plumas	✓	✓
Belden	Plumas	✓	✓
Blairsden	Plumas	✓	✓
Bucks Lake	Plumas	✓	✓
Canyon Dam	Plumas	✓	✓
Caribou	Plumas	✓	✓
Chester	Plumas	✓	✓
Clio	Plumas	✓	✓
Crescent Mills	Plumas	✓	✓
Cromberg	Plumas	✓	✓
Delleker	Plumas	✓	✓
Genesee	Plumas	✓	✓
Graegle	Plumas	✓	✓
Greenville	Plumas	✓	✓
Hamilton Branch	Plumas	✓	✓
Indian Falls	Plumas	✓	✓
Johnsville	Plumas	✓	✓
Keddie	Plumas	✓	✓
La Porte	Plumas	✓	✓
Meadow Valley	Plumas	✓	✓
Mohawk	Plumas	✓	✓
Paxton	Plumas	✓	✓
Portola	Plumas	✓	✓
Prattville	Plumas	✓	✓
Quincy-East Quincy	Plumas	✓	✓
Seneca	Plumas	✓	✓
Taylorsville	Plumas	✓	✓
Twain	Plumas	✓	✓

1. Federal Threat code of x indicates some or all of the wildland fire threat to that community comes from federal (e.g., US Forest Service, BLM, Dept. of Defense) lands.
2. Hazard Level code indicates the fire threat level, where two denotes moderate threat and three denotes high threat

SECTION IV: PRE-FIRE MANAGEMENT STRATEGIES

A: FIRE PREVENTION

Fire History

Wildfire history is a significant factor of the pre-fire management planning process. The fire plan assessment framework incorporates detailed information for determining the most beneficial locations for pre-fire management projects, an idea of the level of service in SRA for the unit, and various assets at risk information. Fire history is a piece of the puzzle that allows unit personnel to learn from our past and make an attempt to prepare for future fire behavior. Having knowledge of fire history provides an account of historic fire travel in a particular area armed with knowledge of historic fire spreads, fire suppression forces are better equipped to predict fire spread potentials.

Identifying where the largest and most damaging fires have occurred is a necessary step in preparing for future wildfire. The most significant aspect of fire history in Lassen-Modoc-Plumas Unit is that personnel are able to compare the relationship between identified assets at risk and the historic burning patterns of wildfire that allows for more informed decision making processes when preparing fire planning documents and procedures.

Ignition Workload Assessment (Level of Service)

(This section will be updated for 2013 using Cal MAPPER Data, upon appointment of LMU Pre Fire Engineer.)

The legislature has charged the Board of Forestry and CAL FIRE with delivering a fire protection system that provides an equal level of protection to lands of similar type and is based in *Public Resources Code 4130*. In order to do this, CAL FIRE needed an analysis process that would define a level of service rating that could be applied to the wildland areas in California to provide a comparison of the level of fire protection being provided. The rating is expressed as the percentage of fires that are successfully attacked.

California has a complex fire environment, and CAL FIRE data on assets at risk to damage from wildfire is incomplete. These factors combine to make it very difficult to develop a true performance-based fire protection planning system. CAL FIRE has resorted to prescription-based fire protection planning (travel times of firefighting resources to incidents, report times for the detection system, the same acreage goal statewide, etc.) as a way to overcome the complexity of the issues. Prescription-based planning is possible but tends to oversimplify some issues. Prescription standards also make it difficult to integrate the interrelationships of various fire protection programs, such as the value of fuel-reduction programs in reducing the level of fire protection effort required.

The following approximation method is proposed to overcome these shortcomings and allow the Unit to proceed with a damage-plus-cost analysis of fire protection performance. This is a

relative system, attempting to measure the impact of fire on the various assets at risk. At the same time, this process produces a level of service rating (LOS).

The rating can be used to describe fire protection services to civilian stakeholders. The level of service rating also provides a way to integrate the contribution of various program components (fire prevention, fuels management, engineering and suppression) toward the goal of keeping damage and cost within acceptable limits.

It is important to reiterate that this system is a relative system and that the ratings are only approximations. In this system, a fire may be considered a failure, based on the firefighting resource draw and size of fire; however, the final fire size and assets protected may have been a true success based on firefighting activities in extreme fire weather conditions.

The result is an initial attack success rate in percentage of fires by vegetation type and area. "Success" is defined as those fires that are controlled before unacceptable damage and cost are incurred and where initial attack resources are sufficient to control wildfires. "Failure" is not meant pejoratively; it just means that, for whatever reasons (access, lack of resources, etc.) the ignition was not contained before it became a more dangerous and damaging fire.

The Fire Plan Ignition Workload Assessment is designed to show effectiveness of the suppression organization in meeting the initial attack fire workload. The attempt at controlling fires before they become large and costly is evaluated in this assessment. The underlying assumption is that fires, successfully contained in the initial attack stages, are not the primary problem. Problem fires are the few that are costly to control or exceed suppression organization capabilities and cause damage.

Fires are grouped into "success" and "failure" categories based on various factors. The assessment groups fires by general vegetation or fuel types (planning belts). Within the fuel type, fires are further classified based on final fire size and weather conditions at the time of ignition. Each fire is classified and labeled as either a successful initial attack or a failure.

Initial attack Success and Failures:

Represents a ten year period for analyses May thru September 2005; planning belt vegetation types were analyzed.

<u>Planning</u>	<u>Belt Success Rate</u>	<u>Successful I.A.</u>	<u>I.A. Failure</u>
Grass	100%	54	0
Brush	95%	370	20
Interior	98%	1920	34
Woodland	98%	3523	80
Agricultural or Urban	96%	248	9

Failures were defined as:

Grass: Fires = 10 acres and above

Brush: Fires = 5 acres and above

Interior: Fires = 3 acres and above

Woodland: Fires = 5 acres and above

Agricultural or Urban: Fires = 10 acres and above

ENGINEERING & STRUCTURE IGNITABILITY

Title 24 (addresses fire apparatus access, water requirements, building materials, and construction methods as of 2007)

The purpose of this code is to establish the minimum requirements consistent with nationally recognized good practices to safeguard the public health, safety and general welfare from the hazards of fire, explosion or dangerous conditions in new and existing buildings, structures, and premises, and to provide safety and assistance to fire fighters and emergency responders during emergency operations.

Title 19, PRC 4290 (addresses fire apparatus access and water requirements)

These regulations have been prepared and adopted for the purpose of establishing minimum wildfire protection standards in conjunction with building, construction and development in State Responsibility Areas (SRA). These regulations shall become effective September 1, 1991. The future design and construction of structures, subdivisions and developments in State Responsibility Area (SRA) shall provide for basic emergency access and perimeter wildfire protection measures as specified in PRC 4290. These measures shall provide for emergency access; signing and building numbering; and vegetation modification. The fire protection standards contained within PRC 4290 shall specify the minimums for such measures.

PRC 4291 (addresses defensible space around structures)

To ensure continued maintenance of properties in conformance with the defensible space requirements outlines in PRC 4290 and to assure continued availability, access, and utilization of the defensible space provided during a wildfire, provisions for annual maintenance shall be included in the development plans and/or shall be provided as a condition of the permit, parcel or map approval. PRC 4291 is the law requiring annual defensible space be provided around all structures in, upon, or adjoining any mountainous area, forest-covered lands, brush-covered lands, grass-covered lands, or any land that is covered with flammable material.

This law was enacted to prevent fire that originates in structures or on premises to spread into forested areas. It was also created to minimize the chances of a forest fire entering into populated areas and destroying improved property and endangering human life. The history of damaging fires has shown the most devastating danger is the risk of fire originating in the wildland and transmitting itself into improved areas. Most statutory hazard reduction requirements and other hazard reduction measures are based upon this concept. However, the risk of wildfire originating on or about structures and their premises is great, and also causes historically damaging fires. The statutory hazard reduction requirements, and other hazard and risk measures, also mitigate the occurrence of structure and premise wildfire ignitions.

Protection Planning

(Fire Protection planning is reviewed at the subdivision and parcel map level and typically implemented at the development stages of a project.)

CAL FIRE is responsible for enforcing Public Resources Code 4290 (SRA only) and Public Resources Code 4291 within Lassen, Modoc and Plumas Counties. Lassen County has adopted CAL FIRE as the County Fire Warden. The Lassen County Fire Warden is responsible for enforcing Public Resources Code 4290 (SRA only), Public Resources 4291 and Lassen County Ordinance 502 in relation to improvement standards on all new building construction (commercial and residential), parcel splits, subdivisions and use permits within Lassen County.

Code enforcement

CAL FIRE enforces forest, state and county laws and regulations to include Public Resource Code, Health and Safety Code. CAL FIRE also enforces building standards adopted by the State Fire Marshall and published in the State Building Standards Code relating to fires or to fire prevention and protection.

Building inspections

The goal of the fire prevention program is to educate homeowners of measures to prevent the ignition and spread of unwanted human-caused fires. Emphasis should be placed on loss reduction and prevention of large and damaging fires and to provide firefighter safety. One of the necessary tools utilized to accomplish this goal is the structural fire prevention inspection. Inspections are a fire prevention engineering activity. Coordinated with other ignition management activities, the inspections are aimed at eliminating or reducing fire hazards and risks by changing the environment through removing or reducing the heat source, modifying or reducing the fuels, and modifying the act or omission, allowing the heat source to contact the ignitable fuels.

INFORMATION AND EDUCATION

Information Program

The Unit provides information to the public through the Fire Prevention Specialist who acts as the Unit's Public Information Officer (PIO). The PIO prepares news releases for the newspapers and radio regarding burning restrictions, burn permit requirements, tips about burning safely, information on creating defensible space, etc. The Unit provides information to the public through its website that contains current burn information and news releases.

During emergency incidents the PIO provides the public with information about the incident; location, acreage, road closures, evacuations, etc. This is accomplished through news releases and radio announcements and via public meetings, information centers and call centers.

It is through education and information that the Unit reduces ignitions. This is accomplished by educating children when they first enter school and continuing that education through adulthood.

Education Program

The Unit's Education Program reaches people of all ages. The Unit's Fire Prevention Specialist teaches children from preschool through junior high school about 9-1-1, Stop, Drop and Roll, (EDITH) Exit Drills in the Home, the Consequences of Playing with Fire, etc. Education is delivered to the schools in Lassen, Modoc and Plumas counties through assemblies, class room training, field trips to CAL FIRE stations and more. In addition to school programs the Unit participates in a variety of other events where there is an opportunity to teach children and adults about fire safety, the requirements of PRC 4291, and the advantages of removing ignition sources from around their homes. Some of those events include:

The Fire Prevention Bureau of the Lassen-Modoc-Plumas Unit has a Juvenile Firesetter Program used to identify and educate youth ages 2-14 about the consequences of playing with fire. The program is two-pronged: it involves intervention with juveniles caught playing with fire and education for juveniles at risk of fire play behavior.

The Unit works with Fire Safe Councils and other local, state and federal agencies to educate the public about the importance of preparing for wildfires, encouraging homeowners to work together to protect their communities. CAL FIRE works with agencies to educate the public about the benefits of community fuel breaks and the advantages of reducing the fuels around their homes.

B. VEGETATION MANAGEMENT

Attainment of the fuel reduction goals of the Lassen–Modoc–Plumas Unit Fire Plan will require on-the-ground effort. The use of CAL FIRE and CDCR crews and equipment will continue to be necessary in many areas where stakeholders do not have the finances or resources to do an effective job individually or as a group. The Vegetation Management program (VMP) is currently a vehicle which CAL FIRE may use resources on privately owned lands. Recently the local FIRE Safe Councils have utilized grant funding to promote fuel reduction in high fire danger areas adjacent to communities using a combination of paid Licensed Timber Operator contractors on larger areas and use of CDCR crews for smaller areas near sensitive locations that do not lend well to mechanical equipment. The Unit continues to participate in a joint effort to target at-risk communities and high fire danger areas in the wildland urban interface (WUI) areas in cooperation with the US Forest Service, BLM, Industrial timberland owners and the local FIRE Safe Councils.

In place since 1981, the VMP program has been an effective fuels reduction / rangeland improvement tool. Because of increasing competition for smoke allotments, CAL FIRE's use of fire to reduce fuel load is in jeopardy. As a result, chipping will likely become the primary disposal method in the future. VMP is a cost-share program; the State's share of a project's cost may range from zero to ninety percent. This is based on a public benefits formula --the greater the benefit to the public, the greater the share of the cost of the project CAL FIRE may assume. Fuels reduction projects in critical areas within the Unit as identified in this plan have a high public to private benefits ratio therefore the unit's efforts should be concentrated in these areas. For example, a project in the Janesville area that reduced fuels around the community would have a high public/private benefit ratio and lower landowner participation is then justified. Conversely, potential projects that are essentially range improvement burns that are not near population concentrations will require a higher degree of landowner effort and proportional costs.

This is not to say that rangeland burning is of minor importance. Through this century, range improvement burns have been vital in managing wildland fuels on a landscape basis. However, increasing population in the rural areas has brought constraints such as smoke management and liability concerns. Such constraints have made the LE-7, range improvement project less attractive and has put VMP projects in higher demand with managers from the timber industry and ranchers.

The unit has experienced a sharp decline in VMP projects due to a series of factors including a very narrow burn window for large acreage projects and a lack of available resources during the appropriate window. Staffing levels have been reduced where only the resources required to staff a shift are on at a given time and must be immediately available for emergency.

The Units Willow VMP project expired in April 2011 and was located northeast of Susanville in Willow Creek Valley. This was a dozer pile and burn project that the Unit started but could not complete due to difficulty in scheduling dozer time in the project where roads are only passable during fire season after roads are dry. Burning of piles that were completed could not be carried out until snow was on site and which then resulted in hike-in burning of the piles.

A portion of the Willow project was set aside where it was determined that the States involvement would result in use of herbicides on the site.

Herbicide use at the time of initial project preparation was not fully covered under the Chaparral Management Program EIR. The Unit has had to reconsider other proposed projects where herbicide use could be an associated result of our actions.

Unit emphasis continues to be placed on community fire protection projects. Focus is also being directed at potentially under burning of eastside pine stands that have been biomass thinned over the last 10 years.

Willow VMP (Expired 2011)

This approximate 50-acre project was largely a reforestation project on SPI property. The method of treatment largely involved utilizing dozer(s) to pile and/or windrow brush fields present in the project area and then burn the piles. The area completed will be planted with a mixture of conifer tree species in an attempt to get the land back into productive timberland. As described above, the entire project was not completed. Future VMP projects may take place in the immediate area in an effort to get the land back into productive timberland.

Hog Flat Fuel Break

This approximate 490-acre project is a roadside shaded fuel brake located along both sides of Highway 44 between Gomez Road and the old Goat Fire. Cal Trans and SPI are the project participants. The method of treatment has largely involved the use of CAL FIRE inmate crews to hand cut and pile burn the treated material. Work on the project is nearly complete with pile burning as the only remaining activity.

Thinning Projects

Both Intermountain and Devils Garden Crews have continued to work on CAL-TRANS right of way roadside thinning projects under the direction of CAL-TRANS where visibility is being improved along the roadway and fuel reduction for fire safety is being achieved.

Hazardous Fuels Reduction

The Unit is also participating in the federally grant funded Hazardous Fuels Reduction program. Projects have been approved near the communities of Janesville, Hamilton Branch, Bieber at Intermountain Camp and Fort Bidwell. The projects involve use of crews to maintain and improve existing fuel breaks that have grown back in with brush and small saplings and reduce the dead and down fuel, loading that is present. Pruning to lift the live fuel canopy off the forest floor is also being carried out. Where piles cannot be burned, a chipper will be utilized to treat slash generated in the thinning and treatment areas.

Industrial timberland managers are also actively working on fuel reduction through biomass thinning adjacent to communities in a number of locations in the Unit. This is in an effort to both protect the residential areas from any fire originating in the wildland and also to protect the valuable timber resources from any fire started in areas near a community, burning into the timber. The Units Resource Management Staff and Fire Prevention Bureau coordinate regularly to discuss areas of high fire danger and where possible, facilitate a means to obtain fuel reduction in locations of greater threat.

SECTION V: PRE- FIRE MANAGEMENT TACTICS

DIVISION / BATTALION / PROGRAM PLANS

Prevention Bureau

The Lassen Modoc Plumas Unit Pre Fire Management Program has been in place since 1997. During the past sixteen years, data has been validated and processed in order to assess vegetative fuels, assets at risk, fire weather, and level of service calculations. The assessments now include changes in the dynamics of the actual on-the-ground work that has been accomplished. This is an ongoing process.

The development of a method for incorporating the current and past Timber Harvest Plans, Emergency Notices, Exemptions, and Non-Industrial Timber Management Plans into a GIS format is under way. The data to be collected and utilized will include the locations and types of fuels treatments in areas containing assets having the greatest value. This information can be utilized in many aspects by the unit and cooperating agencies.

Unit Fire Plan Data Layers

The Unit Fire Management Plan Data layers, which consist of fuels, weather, fire history, emergency activity reporting, assets at risk and level of service have been completed to date, however, conditions are dynamic in nature and must be re-validated on a regular basis.

Unit Fire Management Plan Integration into Daily Operations

Over the years, many of our managers and supervisors have had priorities and goals to reduce fuels around many of the communities within the Unit. The development of the Unit Fire Management Plan was based on the strong support and assistance from the Fire Safe Councils. Many of the ideas from these collective influences are now coming to fruition.

THE CALIFORNIA FIRE PLAN (2010)

The *State Board of Forestry (BOF)* and the *California Department of Forestry and Fire Protection (CAL FIRE)* drafted the *California Fire Plan (2010)*. This document is a comprehensive fire plan for the wildland fire protection in California. The fire plan consists of a planning process that considers: level of service measurements, assets at risk assessments, incorporates the cooperative interdependent relationships of wildland fire protection providers, provides for public stakeholder involvement, and creates a fiscal framework for policy analysis.

Goals and Objectives

The overall goal of the *California Fire Plan* is to reduce the total losses and ever increasing costs from wildland fires in California by protecting the assets at risk through focused pre-fire management prescriptions and improving the potential of initial attack success.

http://webfp1/fpfsweb/documents/cafireplan/2010_Strategic_Fire_Plan_For_California.p

BATTALION 1

Battalion 1 (B-2211 Susanville Battalion Chief) is located in the central and southeastern portion of Lassen County, with the communities of Susanville, Johnstonville, Janesville, Standish, Litchfield, Lake Forest Estates, Stones Landing and Spaulding. The incorporated City of Susanville lays is in the center of the Battalion.

U. S. Highway 395 travels through the Battalion on its east side. State Highways 44, 139 and 36 also travel through the Battalion and intersect with U.S. 395. The elevation of the Battalion is approximately 4500' in the Honey Lake Valley to 7700' on Diamond Mountain, with an average elevation of approximately 5800' on the northeastern plateau of California.

Approximately 32,000 acres of this Battalion are State Responsibility Lands; the only Local Responsibility Land is located within the Honey Lake Valley area, in Susanville City, and portions of the communities of Standish, Janesville and Johnstonville. The highest housing and population concentration in the Unit is located in Battalion 1.

Fuels

The vegetative cover in Battalion 1 is comprised of standing timber on the west and northwest sides of the Battalion and high desert sage, bitterbrush and juniper on the mid and east side of the Battalion. Most of the large fires in Lassen-Modoc-Plumas Unit over the years have occurred in Battalion 1 in the timbered areas.

Fire Weather

Fire weather in Battalion 1 can be extreme because of its location and elevation. Most of the 32,000 acres are in a very dry climate due to being in the rain shadow of the Sierra Nevada Cascade Range. Single digit relative humidity during the summer months is not uncommon and many of the forest fuels remain ready to burn in the late spring to early summer, prior to the finer fuels drying.

Battalion 1 Resources

B-2211 Susanville BC

Susanville Station

2- Fire Engines

1- Bull Dozer

1- Reserve Fire Engine

Landon Lookout

Grasshopper Station

2- Fire Engines

Fredonyer Lookout

Fire Protection Districts and Volunteer Departments within Battalion 1

California Correctional Center

Susanville City Fire Department

Susan River Fire Protection District

Janesville Fire Protection District

Standish-Litchfield Fire Protection District

Doyle Fire Protection District

Eagle Lake Fire Protection District

Stones-Bengard Fire Protection District

Lake Forest Fire Protection District

Milford Fire Protection District

Sierra Army Depot Fire Department

Spaulding Volunteer Fire Department

Herlong Volunteer Fire Department

BATTALION 2

Battalion 2 (Battalion 2212 Westwood Battalion Chief) is located on the west side of Lassen County and includes the Almanor Basin, in Plumas County. The communities of Westwood, Pinetown, Clear Creek, Hamilton Branch, Canyon Dam, Prattville, Almanor West and Chester are all within this Battalion.

State Highways 36, 147, 89 and 44 traverses through Battalion 2. The elevation of the Battalion is approximately 4500' in the Chester area to 7500' on Dyer Mountain, with an average elevation of approximately 5100' in the community of Westwood and the Mountain Meadows area.

In Battalion 2 approximately 13,000 acres are State Responsibility Lands. Local Responsibility Land is located in the town of Chester and the community of Westwood. The population is concentrated in Westwood and the immediate area surrounding Lake Almanor. Battalion 2 is home to approximately 25,000 people. However, this number drops dramatically during the winter months.

Fuels

The vegetative cover in Battalion 2 is predominately standing timber, with some grass, and sage cover.

Fire Weather

Battalion 2 typically receives the most precipitation within the Lassen Modoc Plumas Unit. As much of the area is shaded by Dyer Mountain and Keddie Ridge, the snow pack can linger well into the late spring. Single digit relative humidity during the summer months is not uncommon and many of the forest fuels remain ready to burn in the late spring to early summer, prior to the finer fuels drying.

Battalion 2 Resources

B-2212 Westwood BC

Westwood Station

2- Fire Engines

Peg Leg Lookout

Dyer Mountain Lookout

Eagle Lake Station

1 – Fire Engine

Fire Protection Districts and Volunteer Departments within Battalion 2

Westwood Community Services District and Volunteer Fire Department

Chester Fire Department

Almanor West Fire Department

Hamilton Branch Fire Department

Clear Creek Volunteer Fire Department

Prattville Fire Protection District

Peninsula Fire Protection District

BATTALION 3

Battalion 3 (Battalion 2213 Bieber Battalion Chief) is located in the northwest portion of Lassen County, southwest corner of Modoc County and borders to the west along Shasta – Trinity and Siskiyou Units. The communities of Bieber, Nubieber, Day, Lookout, Little Valley and Adin are located within its boundaries.

State Highways 299 and 139 traverses through the Battalion. Approximately 17,260 acres of this Battalion are State Responsibility Lands; Local Responsibility Land is located in the Big Valley area around the towns of Bieber, Nubieber, and Pittville. The population within the Battalion is found in Bieber, Nubieber, Lookout, Day, Little Valley and Adin. Battalion 3 is home to approximately 1,400 people.

Fuels

The vegetative cover in the Battalion 3 is predominately standing timber with grass/sage cover. The Big Valley area of the Battalion is agricultural with much of the land committed to the production of hay. Many fires in this Battalion grow quite quickly, due to its remoteness and the lack of roads.

Fire Weather

Fire weather in Battalion 3 is typically wetter than that of Battalions 1 and 4 that are located in the rain shadow of the Sierra/Cascade Mountains. However, as most of the terrain is un-shaded, snow pack usually melts off by early spring. Single digit relative humidity during the summer months is not uncommon and many of the forest fuels remain ready to burn in the late spring to early summer, prior to the finer fuels drying.

Battalion 3 Resources

Battalion 2213 Bieber BC

Bieber Station

2- Fire Engines

1- Helicopter and crew

Snag Hill Lookout

Happy Camp Station

1 – Fire Engine

Fire Protection Districts and Volunteer Departments within Battalion 3

Big Valley Fire Protection District

Lookout Volunteer Fire Department

Adin Volunteer Fire Department

McArthur Volunteer Fire Department (Day Bench)

Little Valley Community Services District

BATTALION 4

Battalion 4(Battalion 2214 Alturas Battalion Chief) is located in the northeastern portion of the Lassen –Modoc - Plumas Unit. It is situated on the east half of Modoc County with Oregon to the north and Nevada to the east. The southern end of the Battalion is within the northeastern part of Lassen County. The communities of Alturas, Canby, Likely, and Madeline are located within its boundaries. Battalion 4 also services the communities of Davis Creek, New Pine Creek, Willow Ranch, Cedarville, Eagleville, Lake City and Fort Bidwell.

U. S. Highways 395, 299 and State Highway 139 traverse through the Battalion. Approximately 21,500 acres of this Battalion are State Responsibility Lands; Local Responsibility Land surrounds the community of Alturas and extends south to Likely. Battalion 4 is home to approximately 1800 people.

Fuels

The vegetative cover in the Battalion is predominately standing timber in the mountains, with juniper grass/sage cover in the eastern half of the battalion where the terrain is at a lower elevation. Many fires in this Battalion grow quite quickly due to the remoteness of the area and lack of roads.

Fire Weather

Fire weather in Battalion 4 is drier on average than Battalion 2 and 3 with Battalion 4 being in the rain shadow of the Sierra Cascade/Mountains. Snow pack will accumulate in the Upper Cal-Pines area shaded by Manzanita Ridge, and remains into late spring. Valley areas usually receive limited snow fall that rarely lingers. Single digit relative humidity during the summer months is not uncommon and many of the forest fuels remain ready to burn in the late spring to early summer, prior to the finer fuels drying.

Battalion 4 Resources

Alturas Station
2- Fire Engines
Likely Mountain. Lookout

Deer Springs Station
1 – Fire Engine

Fire Protection Districts and Volunteer Departments within Battalion 4

Alturas City Fire Department
Alturas Rural Fire Protection District
Cal Pines Community Service District
Canby Fire Protection District
Cedarville Fire Protection District
Davis Creek Fire Protection District
Eagleville Fire Protection District
Fort Bidwell Fire Protection District
Lake City Fire Protection District
Likely Fire Protection District
Madeline Fire Protection District
Willow Ranch Fire Protection District
New Pine Fire Protection District

Antelope Camp

Antelope Camp is operated by the California Department of Forestry and Fire Protection and the California Department of Corrections and Rehabilitation. The camp is located in the California Correctional Center, eight miles east of Susanville in Lassen County.

Opened in 1963, the facility houses 120 level-one inmates, and provides five 17-man fire crews. Antelope Camp is an excellent resource for the local community and the state in emergency response and conservation work. During 2012, Antelope Conservation Camp provided the local communities with 30,608 hours of project and conservation work, including the Janesville Fuel Break, Almanor Fuel Break and several shaded fuel breaks along State Routes 36 and 44. State agencies benefited from 17,136 hours of project work, and federal agencies—5,152. The fire season of 2012 saw Antelope Crews dispatched to 60 incidents and logging over 83,400 hours of fire suppression.

Antelope Camp is staffed by CAL FIRE and CDCR personnel. CAL FIRE staff includes one Division Chief, one Heavy Equipment Mechanic, one Office Technician, and eight Fire Captains.

Susanville Training Center

Susanville Training Center is operated by the California Department of Forestry and Fire Protection and the California Department of Corrections and Rehabilitation, and is one of two training centers providing inmate fire fighters to conservation camps statewide. Susanville Training Center is located in the California Correctional Center eight miles east of Susanville in Lassen County.

The training center provides highly trained inmates to conservation camps located in the north state. Inmates undergo one week of classroom training and a week of field training, covering wildland fire safety and attack, hand tool use, teamwork, and crew expectations. In addition to receiving education in fire fighting and safety, each inmate is trained and evaluated for physical fitness. During 2012, the Susanville Training Center held 93 classes and graduated over 1,300 inmates from the Forestry Fire Training Program.

Susanville Training Center is staffed by CAL FIRE personnel. CAL FIRE staff includes one Battalion Chief, one Office Technician, and seven Fire Captains

Intermountain Camp

Intermountain Camp is operated by the California Department of Forestry and Fire Protection and the California Department of Corrections and Rehabilitation. The camp is located east of Redding, outside the community of Bieber in Lassen County. It sits on a beautiful site, nestled in the pines at the base of Big Valley Mountain.

Opened in 1962, the facility houses 80 level-one inmates, and provides four 17-man fire crews. Intermountain Camp is an excellent resource for the local community and the state in emergency response and conservation work. During 2012, Intermountain Conservation Camp provided the local communities with 33,112 hours of fire prevention and conservation work, including the Intermountain Camp Fuel Break, the Rush Creek Estates Fuel Break and several shaded fuel breaks along State Routes 299 and 89. State agencies benefited from 16,592 hours of project work, and federal agencies—5,960. The fire season of 2012 saw Intermountain Crews dispatched to 43 incidents and logging over 55,500 hours of fire suppression.

Intermountain Camp is staffed by CAL FIRE and CDCR personnel. CAL FIRE staff includes one Division Chief, two Heavy Fire Equipment Operators, one Water & Sewer Plant Operator and eight Fire Captains.

Devil's Garden Camp

Devil's Garden Camp is operated by the California Department of Forestry and Fire Protection and the California Department of Corrections and Rehabilitation. The camp is located seven miles south of Alturas, in Modoc County. It sits on the Devil's Garden Plateau which spans all the way from Alturas to Oregon.

Opened in 1989, the facility houses 120 level-one inmates, and provides five 17-man fire crews. Devil's Garden Camp is an excellent resource for the local community and the state in emergency response and conservation work. During 2012, Devil's Garden Conservation Camp provided the local communities with 96,336 hours of project and conservation work, including the Modoc Recreational Estates Fuel Break and the Ft. Bidwell Fuel Break. State agencies benefited from 30,216 hours of project work, and federal agencies—94,008. The fire season of 2011 saw Devil's Garden Crews dispatched to 32 incidents and logging over 98,800 hours of fire suppression.

Devil's Garden Camp is staffed by CAL FIRE and CDCR personnel. CAL FIRE staff includes one Division Chief, two Heavy Fire Equipment Operators, one Office Technician, one Water & Sewer Plant Operator and 10 Fire Captains.

APPENDIX A: PRE- FIRE PROJECTS

Overview

The Lassen Modoc Plumas Unit has developed an objective ranking process to prioritize prospective fuels modification projects. The ranking process was developed by local subject matter experts and is designed to emphasize the benefits to public safety and to assist in the prevention of large costly fires.

Identification of communities at risk was determined by California Fire Alliance. Information from the Fire Threat Map developed using statistical information from the Fire and Rescue Assessment Program (FRAP) was also utilized. A formula using fire history, potential fire threat and proximity to fire suppression resources was developed to aid in the prioritizing of projects for communities at risk for the Community Wildfire Protection Plan (CWPP).

Listed below are the descriptions and the values assigned to the ranking process;

Fire History within 3 miles of a “Community at Risk” to a wildfire

10-100 acres within past 10 years; 1 Point per fire

100+ acres within past 10 years; 2 Points per fire

Any major fire having threatened a community within the last 10 years; 2 Points per fire

Fire Threat Based on FRAP Fuel Types

Non-Fuel; 0 Points

Moderate; 2 Points

High; 4 Points

Very High; 6 Points

Extreme; 8 Points

Response Times to a “Community at Risk” to a wildfire

< 10 minutes; 0 Points

10-20 minutes; 1 Point

20-30 minutes; 2 Points

> 30 minutes; 3 Points

Community proximity to a “Community at Risk” to a wildfire

For each community within approximately 3 miles of a project; 1 Point

BATTALION 1

Battalion 1 is working closely with the Lassen County Fire Safe Council (LCFSC), and Local Government Fire Fighting Agencies towards community preparedness in the event of wildland fire threats. Communities at risk from wildland fires, along the escarpment from Milford north to the Susan River area west of Susanville and the Lake Forest area have been prioritized. Wildland Urban Interface (WUI) has been addressed by focusing on communities at risk within Battalion 1. WUI maps have been and are continuing to be developed for targeted areas that contain roads, dwellings, hazards, water sources, areas of safe refuge among other information to assist in wildfire suppression efforts.

Battalion 1 is also working closely with the Lassen County Sheriff's Office (LCSO) on evacuation plans. Using WUI maps as a guide, evacuation zones will be established by the LCSO. In the event of a wildland incident requiring evacuations, fire agencies and the LCSO will have a preplanned evacuation process in place for a cooperative effort to insure public safety as a priority for such an event.

In an effort to protect communities at risk there are projects underway identified in the CWPP. Working in cooperation, Antelope Camp fire crews and the LCFSC are engaged in fuel modification projects. Through thinning and disposal of excess vegetation on private and federally owned lands a fuel break is proposed to protect communities at the base of the escarpment from Milford north to the Susan River area.

The Unit is currently researching the feasibility of two fuel breaks in the greater Susanville area. The first is located to the west of town in the Cheney Creek Road area. The second is on the east side of Susanville along Richmond Road. Both areas have a fire history that strongly supports the necessity of fuel breaks or fuel modification.

To this effort, the following communities and projects have been identified.

Lake Forest Estates

In the community of Lake Forest, an evacuation map has been developed and distributed that has designated lookouts, safety zones and escape routes for the residents. In addition, a shaded fuel break was completed and is being maintained around the area. This project directly benefits approximately 650 people and 215 structures.

Elysian Valley/Baxter Creek

In the communities of Elysian Valley & Baxter Creek, an evacuation map has been developed and distributed that has designated water sources, safety zones and escape routes for the residents. Shaded fuel breaks have also been completed in this area. This project directly benefits approximately 225 people and 70 structures.

BATTALION 2

Battalion 2 is actively working with the communities of Westwood, Clear Creek and the Lake Almanor Basin. The Basin Communities include Hamilton Branch, Peninsula, West Almanor, Prattville and Chester. Battalion 2 is also working closely with the Plumas County Fire Safe Council, Lassen County Fire Safe Council and Lake Almanor Fire Safe Council, as well as the Plumas and Lassen county Sherriff's Offices to devise a fire and evacuation plan for the communities at risk. All the departments meet annually to discuss any concerns dealing with emergency responds or fire concerns.

Several different methods have been utilized to educate the public in these areas, including the use of the Fire Wise community literature, the CAL FIRE's "Ready, Set, Go" program, public meeting and regular 4290 and 4291 inspections.

To this effort, the following communities and projects have been identified.

Clear Creek

A fuels reduction project has been applied for and funded for the area surrounding the community of Clear Creek. This project will directly benefit approximately 300 people and 100 structures.

Almanor Basin

The structure count for the area is approximately 20,000 structures with a seasonal population fluctuation between 8,000 to 25,000 people a year. Through grant and fundraising efforts the fire safe councils have been able to do community fire safe projects in the area by the utilization of inmate and forest service crews to do brush clearing project which are used as fire breaks around some of the communities.

West Almanor

In the community of West Almanor, a fuels reduction project is active and ongoing. West Almanor Fire Department is working on their evacuation plan. They have adopted the fire wise community plan as well as the 4290 and 4291 inspection process along with the "Ready, Set, Go" literature to help reach their goals, and are working on identifying public places of refuge. These projects will directly benefit approximately 2,000 people and 1,000 structures.

Peninsula

The Peninsula community is home to approximately 2,000 people and 1,500 structures. The Peninsula Fire Department also has a fire and evacuation plan in place with identified areas of safe refuge. They are in the process of becoming a "Fire Wise Community" and have implemented the CAL FIRE 4290 & 4291 inspection process.

Hamilton Branch

The community of Hamilton Branch is home to approximately 1600 people and 800 structures.

Prattville

The community of Prattville is home to approximately 200 people and 90 structures.

BATTALION 3

Battalion 3 is working closely with the Modoc County Fire Safe Council, The Lassen County Fire Safe Council and the Day Road Area Fire Safe Council, as well as Local Government Fire Fighting Agencies towards community preparedness in the event of wildland fire threats. To this effort, the following communities and projects have been identified.

Butte Creek Estates

In the area of Butte Creek Estates an evacuation map has been developed and distributed that has designated water sources, safety zones and escape routes for the residents. This project will directly benefit approximately 50 people and 28 structures.

Day Road

In the community of Day Road, a WUI evacuation map has been developed and distributed that has designated water sources, safety zones and escapes routes for the residents. Because this area is a boundary between LMU and SHU, we continue to work closely with that Unit and the Shasta County Fire Safe Councils to identify hazardous areas and preventative actions. LE-100 Inspections and Burn Permit regulations have also been coordinated. A Mutual Threat Zone is being established to better utilize initial attack dispatching between the two Units. This project will directly benefit approximately 250 people and approximately 225 structures.

Little Valley

A fuels reduction project has been applied for and funded for the area surrounding the community of Little Valley. This project will directly benefit approximately 50 people and 35 structures.

Ash Valley

A fuels reduction project has been applied for and funded for the area surrounding the community of Ash Valley. This project will directly benefit approximately 20 people and 15 structures.

Kramer Ranch

A fuels reduction project has been applied for and funded for the area surrounding the community known as Kramer Ranch, south of Lookout. This project will directly benefit approximately 150 people and approximately 50 structures, as well as the Intermountain Conservation Camp.

BATTALION 4

Battalion 4 is working closely with the Modoc County Fire Safe Council (MCFSC), Modoc County Sheriff's Office (MCSO) and Local Government Fire Fighting Agencies towards community preparedness in the event of wildland fire threats. To this effort, the following communities and projects have been identified.

Modoc Recreation Estates (MRE)

In MRE a WUI evacuation map has been developed and distributed that has designated water sources, safety zones and escape routes for the residents. Staff members have been working with the Modoc fire safe council on brushing operations for fire breaks on several roads. This project will directly benefit approximately 300 people and 200 structures. Contact has been made and dialog is continuing with the USFS on improving Co Rd 55 to the north for an escape route onto the Devil's Garden area.

Thomas Creek

In the community of Thomas Creek, a WUI evacuation map has been developed and posted that designates water sources, safety zones and escapes routes for the residents. Battalion staff are still working with this community to identify hazardous areas and what preventative action will be taken. This project will directly benefit approximately 150 people and 75 structures.

Summerland

In the community of Summerland, a WUI evacuation map has been developed and distributed that designates water sources, safety zones and escapes routes for the residents. Battalion staff continue to work with the residences of this community to identify hazardous areas and what preventative action will be taken. This project will directly benefit approximately 50 people and 25 structures.

Cal Pines

The Cal Pines community is just starting the process of getting information for mapping and identifying safety zones, water sources, and escape routes. Several hazardous locations need to be addressed in upper Cal Pines. Due to the size and complexity of Upper and Lower Cal Pines this project may be broken into multiple phases.

Batt	Project Number	Project Name	Status	Estimated Completion Year	Project Type	Net Acres
1/2		Children's Fair Susanville	O	Annual	Education	
3/4		Prevention Expo McArthur	O	Annual	Education	
1/2		Wildland Field Day with local Departments	O	Annual	Education	
3/4		Wildland Field Day with local Departments	O	Annual	Education	
3/4	0716	Rush Creek Estate Fuel Reduction	P	2012	Reduction	
3/4	0479	Rush Creek Fuel Reduction	P	2012	Reduction	
2		Clear Creek	P	2013	Reduction	
3		Little Valley	P	2013	Reduction	
1		Janesville	O	2013	Reduction	
1		Milford	P	2013	Reduction	
1		Diamond Mtn. Forest and Meadow Restoration	P	2014	Restoration	
3		Ash Valley	O	2014	Reduction	
3		Lookout	P	2013	WUI	
3		Kramer Ranch	P	2014	Reduction	

Status Guide: A = Active, P = Planning, C = Completed, O = Ongoing, M = Maintenance.

APPENDIX B: UNIT GOALS AND OBJECTIVES

CAL FIRE Units were asked to identify two or more priority objectives under each goal in the 2010 Strategic Fire Plan for California. The Units' priorities are identified in bold and a measurement criteria are provided for each of the identified objectives. Throughout the next year, the Units will implement the identified priorities and report on the measurement criteria by June 2012. The priority objectives are displayed under three headings:

A. SACRAMENTO PROGRAMS OR COMMITTEE ONLY

B. SACRAMENTO PROGRAMS AND STAFF OR COMMITTEE, REGIONS AND UNITS

C. UNITS ONLY

These categories are not intended to exclude Units from addressing priority objectives in any of the three categories, they are only recommendations.

A. SACRAMENTO PROGRAMS OR COMMITTEE ONLY

Goal 1: Identify and evaluate wildland fire hazards and recognize life, property and natural resource assets at risk, including watershed, habitat, social and other values of functioning ecosystems. Facilitate the sharing of all analyses and data collection across all ownerships for consistency in type and kind.

Objectives:

- a) **Identify and provide appropriate automated tools to facilitate the collection, analysis and consistent presentation of datasets.**

Measurement Criteria: *CAL FIRE shall establish policy that specifies spatial databases covering all forest and rangeland to not be older than 10 years. Include minimum requirements for spatial databases. Follow the coordinated work schedule with the USDA Forest Service to maintain cost effective collection and processing of data.*

Goal 2: Articulate and promote the concept of land use planning as it relates to fire risk and individual landowner objectives and responsibilities.

Objectives:

- a) **Identify the minimum key elements necessary to achieve a fire safe community, and incorporate these elements into land use planning, CWPPs and regional, county and Unit fire plans.**

Measurement Criteria: *CAL FIRE to create a working committee with CAL Chiefs, USDA Forest Service and other key organizations to develop, monitor and refine elements of fire safe community, including evacuation plans. The Committee shall review existing templates for FIREWISE Assessments, CWPPs, fire plans and land use plans; identify the common elements and approaches for better integration. Utilize fire protection, planning and engineering expertise to identify the key elements (from existing templates) necessary for fire safe communities. Once agreed upon, these key elements will then be used as a checklist to guide*

consistency in fire safe planning efforts across jurisdictions. At a minimum, annually report to the Board on results.

Goal 3: Support and participate in the collaborative development and implementation of wildland fire protection plans and other local, county and regional plans that address fire protection and landowner objectives.

Objectives:

- a) **Establish a working group, consisting of Board members and Departmental staff, to develop minimum standard elements for inclusion in Unit fire plans.**
- b) **Emphasize coordination of Unit fire plans with community wildfire protection plans to encourage and support one consistent approach. Develop county or regional fire plans by bringing together community-based groups, such as fire safe councils and affected fire and land management agencies.**

Measurement Criteria: *These measurement criteria meets objectives a and b. CAL FIRE to revise the template for the Unit fire plans to incorporate the goals and objectives of the 2010 Strategic Fire Plan. During the revision, the template for a CWPP will be jointly reviewed in order to reduce duplication of fire planning efforts. The key elements identified through the process identified in Goal 2, Objective b will also be incorporated into the Unit fire plan/CWPP.*

- c) **Create and support venues in which individual community members can be actively involved in local FIRE safe councils, community emergency response teams, FIREWISE and other community-based efforts to develop readiness plans and educate landowners to mitigate the risks and effects of wildland fire.**

Measurement Criteria: *The California Fire Alliance to work with the California and local FSCs to develop venues (e.g., workshops) that assist landowners with readiness planning and education. CAL FIRE, California Fire Alliance Liaison to report to the Board annually on Alliance activities.*

Goal 4: Increase awareness, knowledge and actions implemented by individuals and communities to reduce human loss and property damage from wildland fires, such as defensible space and other fuels reduction activities, fire prevention and fire safe building standards.

Objectives:

- a) **Educate landowners, residents and business owners about the risks and their incumbent responsibilities of living in the wildlands, including applicable regulations, prevention measures and preplanning activities.**

Measurement Criteria: *In coordination with the CAL FIRE Communications Program, the USDA Forest Service and local FIRE agencies, University of California and county cooperative*

extension offices, CAL FIRE to collect information on methods and effectiveness of existing outreach. Complete the information collection within year one of adoption of the 2010 Strategic Fire Plan. Develop a common set of measures to assess CAL FIRE efforts, build those into Unit fire plans and report to the Board. Report the progress of implementation at the end of year two.

Goal 5: Develop a method to integrate fire and fuels management practices with landowner priorities and multiple jurisdictional efforts within local, state and federal responsibility areas.

Objectives:

b) Work to remove regulatory barriers that limit hazardous fuels reduction activities.

Measurement Criteria: *In conjunction with the Resource Protection Committee, CAL FIRE will develop an approach to identifying and recommending ways to address regulatory and other barriers that limit hazardous fuels reduction activities. This approach should include consultation with the Board's Interagency Forestry Working Group and with other agencies, such as the USDA Forest Service, the US Fish and Wildlife Service, the California Energy Commission, the Department of Fish and Game, regional water quality control boards, local government and the public. Finish this compilation within the first year of adoption of the 2010 Strategic Fire Plan. Based on barriers identified and recommendations for change, report to the Board starting in the second year.*

Goal 6: Determine the level of fire suppression resources necessary to protect the values and assets at risk identified during planning processes.

Objectives:

e) Initiate and maintain cooperative fire protection agreements with local, state and federal partners that value the importance of an integrated, cooperative, regional fire protection system and deliver efficient and cost effective emergency response capabilities beneficial to all stakeholders.

Measurement Criteria: *CAL FIRE to identify the number and effectiveness of agreements and partnerships. In conjunction with the Board's Resource Protection Committee, CAL FIRE will develop suggested measures of effectiveness of cooperative agreements. This should be in collaboration with its partners, completed within 18 months of adoption of the 2010 Strategic Fire Plan and reported to the Board.*

i) Provide for succession planning and employee development at all levels within CAL FIRE to maintain emergency response leadership capabilities, administrative management skills and pre-fire planning expertise.

Measurement Criteria: *CAL FIRE to revise and update the information developed in the 2005 Succession Planning meetings. This work should be completed within two years of the adoption*

of the 2010 Strategic Fire Plan, with annual reporting to the Board based on issues raised, including identification of key training needs, funding available and expenditures on the training program, content of Academy curricula, number of students requesting and/or able to take classes at the Academy, local community college or other educational outlets.

B. SACRAMENTO PROGRAMS AND STAFF OR COMMITTEE, REGIONS AND UNITS

Goal 1: Identify and evaluate wildland fire hazards and recognize life, property and natural resource assets at risk, including watershed, habitat, social and other values of functioning ecosystems. Facilitate the sharing of all analyses and data collection across all ownerships for consistency in type and kind.

Objectives:

- b) Engage and participate with local stakeholder groups (i.e., fire safe councils and others) to validate and prioritize the assets at risk.**

Measurement Criteria: *CAL FIRE shall designate personnel as advisors/liaisons to the California Fire Safe Council (CFSC) and to each county or regional FSC. The advisors will be responsible for reporting activities to the Unit and Region. The advisor to the CFSC will report to the Board. Annual reporting of time-spent working will be displayed in hours at the Unit, Region and Headquarters level. Reporting will include activities with local FSCs, communities, watershed groups or others defining hazards and risk of wildfire and documenting these in a CWPP or Unit fire plan. Emphasize the products developed in Goal 3, Objective b. Advisors will emphasize using standard guidelines and templates for consistency throughout the state.*

Goal 2: Articulate and promote the concept of land use planning as it relates to fire risk and individual landowner objectives and responsibilities.

Objectives:

- b) Assist the appropriate governmental bodies in the development of a comprehensive set of wildland and wildland urban interface (WUI) protection policies for inclusion in each county general plan or other appropriate local land use planning documents.**

Measurement Criteria: *CAL FIRE to appoint a committee including Unit, Region, Headquarters and Contract County representatives. Develop a work plan that identifies key elements of improving WUI strategies, including planning. Reporting should be based on elements identified and priorities for addressing them.*

Under the Board's Resource Protection Committee, review existing Board policies as they relate to wildland fire and the relevance (ease of use, applicability) to incorporation in local general plans. Identify areas of possible improvement and update policies.

Track and report hours at the Unit, Region and Headquarters level spent in reviewing plans and projects; number of local Board/Council, Planning Commission meetings and/or meetings with other cooperators.

Goal 4: Increase awareness, knowledge and actions implemented by individuals and communities to reduce human loss and property damage from wildland fires, such as defensible space and other fuels reduction activities, fire prevention and fire safe building standards.

Objectives:

- c) **Increase the number and effectiveness of defensible space inspections and promote an increasing level of compliance with defensible space laws and regulations through the use of CAL FIRE staffing as available, public and private organizations, and alternative inspection methods.**

Measurement Criteria: *CAL FIRE to form an advisory committee to review PRC §4291 regulations and make recommendations to the Board that will provide for consistency, streamlining and clarification of existing regulations. The Committee shall develop criteria to increase the number and effectiveness of defensible space inspections. The Committee will develop an implementation plan for the recommendations and report on progress to the Board*

Goal 7: Address post-fire responsibilities for natural resource recovery, including watershed protection reforestation, and ecosystem restoration.

Objectives:

- a) **Encourage rapid post-fire assessment, as appropriate, and project implementation to minimize flooding, protect water quality, limit sediment flows and reduce other risks on all land ownerships impacted by wildland fire.**

Measurement Criteria: *Provide training for CAL FIRE personnel on suppression repair and damage assessment procedures. Develop standard formats and documentation templates for these assessments. Identify and use the findings to reduce the impacts of fire suppression on the landscape and improve resiliency of assets at risk from wildfire.*

C. UNITS ONLY

Goal 5: Develop a method to integrate fire and fuels management practices with landowner priorities and multiple jurisdictional efforts within local, state and federal responsibility areas.

Objectives:

- h) **Support the availability and utilization of CAL FIRE hand crews and other CAL FIRE resources, as well as public and private sector resources, for fuels management activities, including ongoing maintenance.**

Measurement Criteria: *CAL FIRE will report to the Board on the number of crews available each year with a description of projects, including acres treated, completed by each Unit. Report the number of agreements and/or amount of funding and acres treated that involve grants or partnerships with federal agencies, resource conservation districts, local FSCs, fire districts, watershed groups or other non-profit or community groups that support the ability to carry out fuels reduction projects.*

Goal 7: Address post-fire responsibilities for natural resource recovery, including watershed protection reforestation, and ecosystem restoration.

Objectives:

- e) **Assist landowners and local government in the evaluation of the need to retain and utilize features (e.g., roads, firelines, water sources) developed during a fire suppression effort, taking into consideration those identified in previous planning efforts.**

Measurement Criteria: *CAL FIRE (utilizing Incident Command Teams) to schedule a post-fire review of the planning documents that cover the area affected by the fire. Review the goals, objectives and projects (implemented and planned) to identify successes and failures. Review the features developed during the fire and incorporate them into the existing Unit fire plan documents. This objective will only be reported when a fire occurs in an area with an existing Unit fire plan document. Incident command teams may conduct this post fire assessment under the direction of the Unit Chief.*

APPENDIX C: UNIT RESPONSE REPORT

Battalion 1 Response Report (2012)

State Responsibility Area (SRA) - Local Responsibility Area (LRA)

	Wildland	Structure	Other / False Alarms	TCs	Medicals	Hazards	Public Assists	Others	Total
LRA	13	11	51	35	45	6	3	19	183
SRA	15	0	3	0	0	0	0	0	18
Total	28	11	54	35	45	6	3	19	201

Battalion 2 Response Report (2012)

State Responsibility Area (SRA) - Local Responsibility Area (LRA)

	Wildland	Structure	Other / False Alarms	TCs	Medicals	Hazards	Public Assists	Others	Total
LRA	1	21	27	15	118	8	10	7	207
SRA	16	0	3	0	0	0	0	0	19
Total	17	21	30	15	118	8	10	7	226

Battalion 3 Response Report (2012)

State Responsibility Area (SRA) - Local Responsibility Area (LRA)

	Wildland	Structure	Other / False Alarms	TCs	Medicals	Hazards	Public Assists	Others	Total
LRA	4	2	11	12	38	3	3	18	91
SRA	13	0	0	0	0	0	0	0	13
Total	17	2	11	12	38	3	3	18	104

Battalion 4 Response Report (2012)

State Responsibility Area-SRA Local Responsibility Area- LRA

	Wildland	Structure	Other / False Alarms	TCs	Medicals	Hazards	Public Assists	Others	Total
LRA	9	9	20	16	93	4	1	10	162
SRA	11	0	3	0	0	0	0	0	14
Total	20	9	23	16	93	4	1	10	176

LMU Assist to Other Agencies Response Report (2012)

LNF-USFS Lassen National Forest
NOD-BLM Northern Operational District
LNP-NPS Lassen Volcanic National Park
ECC-SIFC Susanville Interagency Fire Center

	Wildland	Structure	Other / False Alarms	TCs	Medicals	Hazards	Public Assist	Others	Total
LNF Assist	15	0	5	9	10	0	0	3	42
NOD Assist	24	2	5	2	5	1	0	0	39
LNP Assist	2	0	0	0	4	0	1	0	7
ECC	0	0	0	0	0	0	0	142	142
Total	123	45	128	89	313	22	18	199	937

APPENDIX D: UNIT IGNITIONS REPORT

The greatest determined cause of ignitions within the Lassen Modoc Plumas Unit was Debris Burns. Below are Ignition Reports broken down by Battalion:

Battalion 1 Ignitions Report (2012)

UNDETERMINED	7
LIGHTNING	4
CAMP FIRE	0
SMOKING	0
DEBRIS BURN	6
ARSON	4
EQUIPMENT	5
RAILROAD	0
PLAYING WITH FIRE	4
OTHER/MISC	2
TOTAL	32

Battalion 2 Ignitions Report (2012)

UNDETERMINED	8
LIGHTNING	1
CAMP FIRE	4
SMOKING	1
DEBRIS BURN	4
ARSON	0
EQUIPMENT	1
RAILROAD	1
PLAYING WITH FIRE	0
OTHER/MISC	3
TOTAL	23

Battalion 3 Ignitions Report (2012)

UNDETERMINED	3
LIGHTNING	5
CAMP FIRE	0
SMOKING	0
DEBRIS BURN	4
ARSON	1
EQUIPMENT	3
RAILROAD	0
PLAYING WITH FIRE	0
OTHER/MISC	1
TOTAL	17

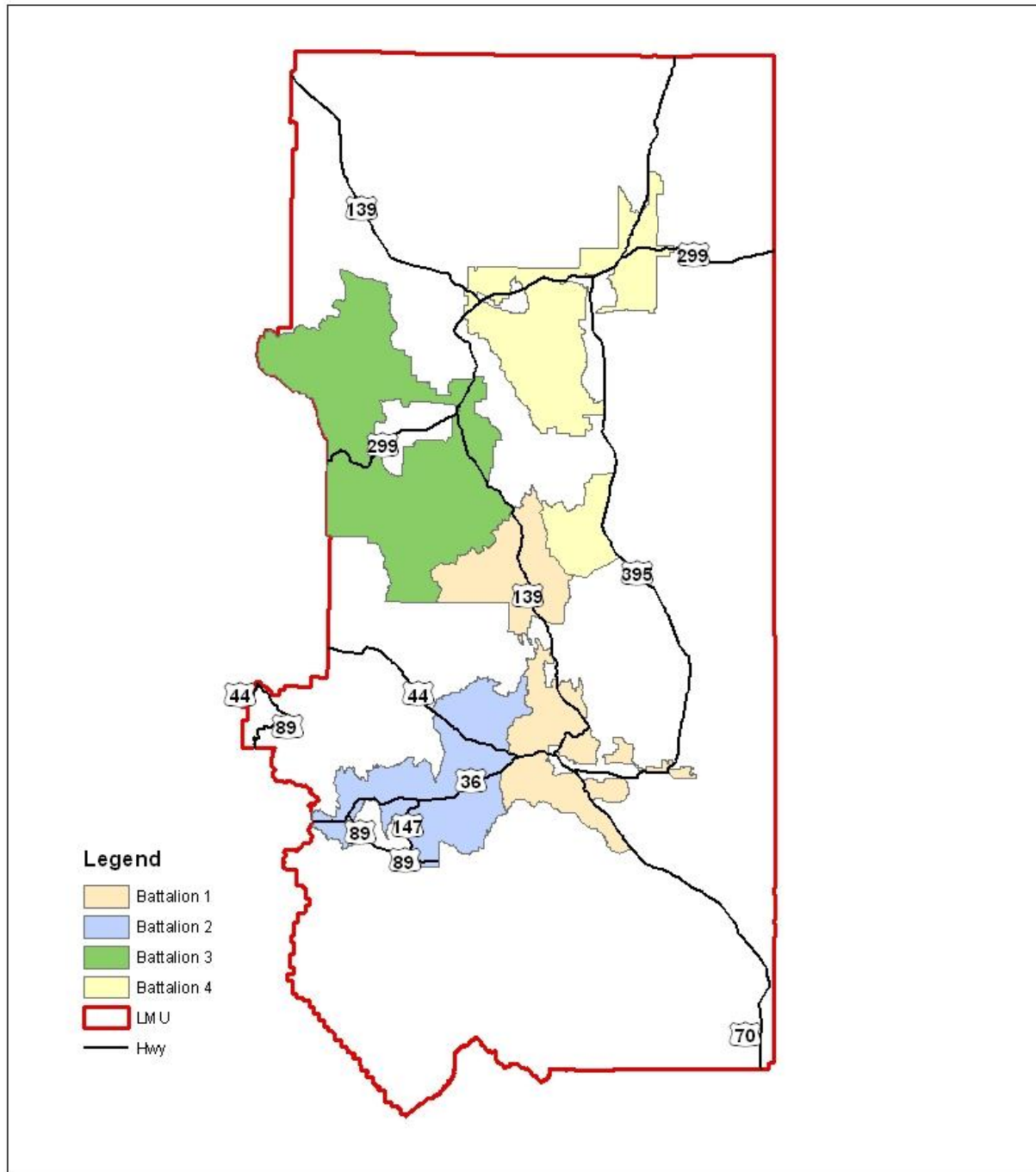
Battalion 4 Ignitions Report (2012)

UNDETERMINED	0
LIGHTNING	1
CAMP FIRE	1
SMOKING	1
DEBRIS BURN	3
ARSON	0
EQUIPMENT	0
RAILROAD	0
PLAYING WITH FIRE	0
OTHER/MISC	3
TOTAL	9

EXHIBITS: UNIT & BATTALION MAPS

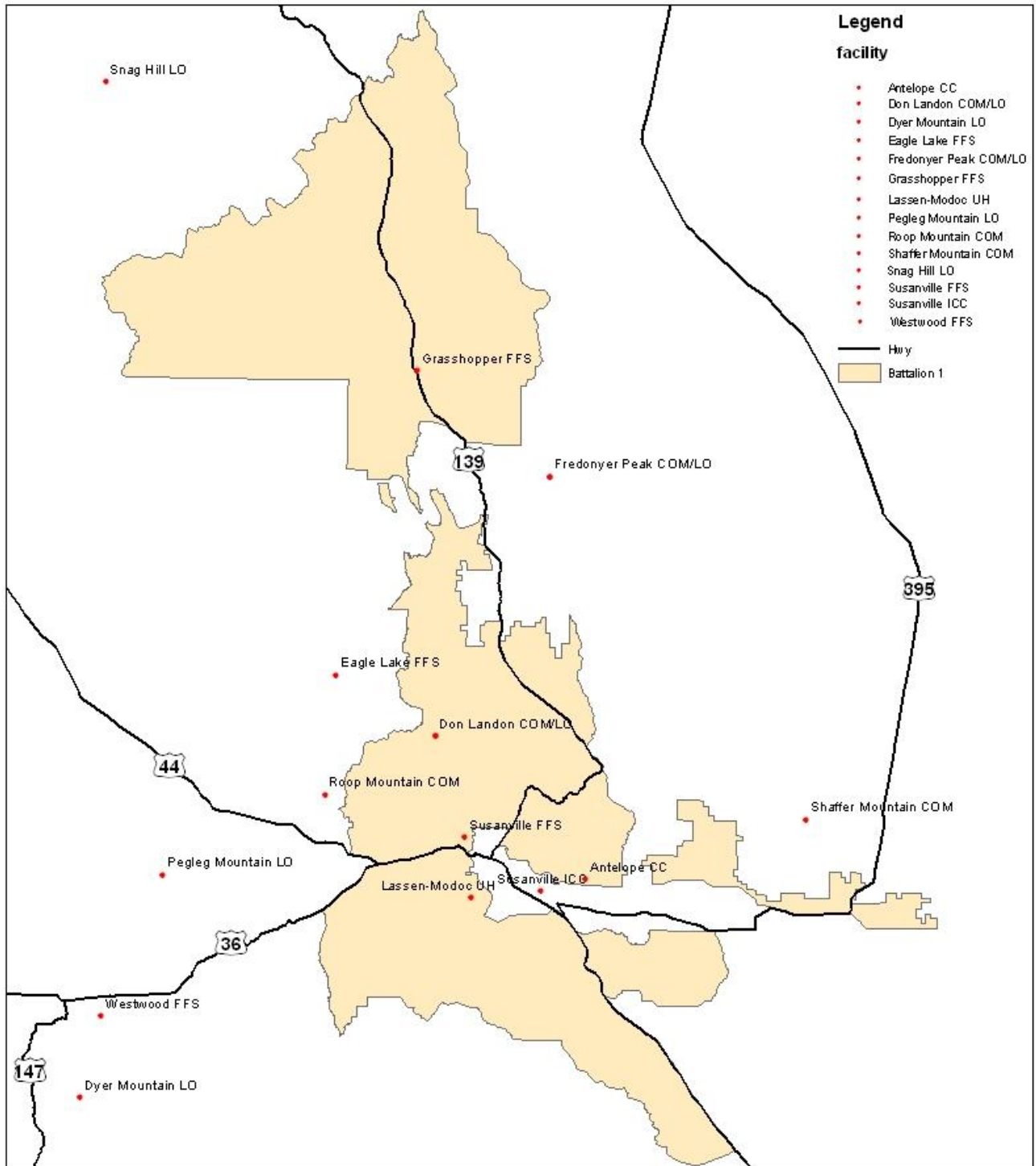


Lassen Modoc Plumas Unit





Battalion 1






Battalion 2



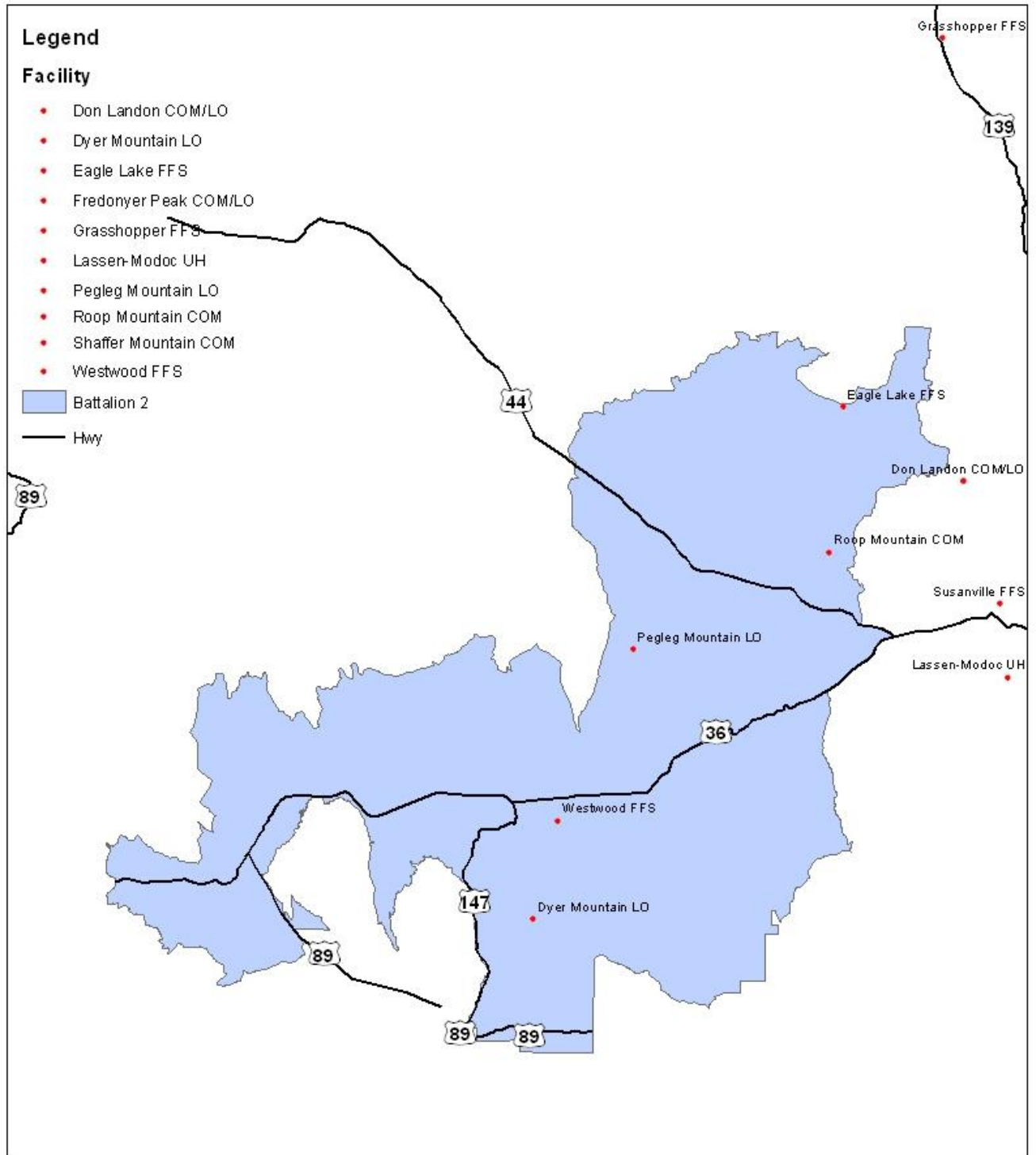
Legend

Facility

- Don Landon COM/LO
- Dyer Mountain LO
- Eagle Lake FFS
- Fredonyer Peak COM/LO
- Grasshopper FFS
- Lassen-Modoc UH
- Pegleg Mountain LO
- Roop Mountain COM
- Shaffer Mountain COM
- Westwood FFS

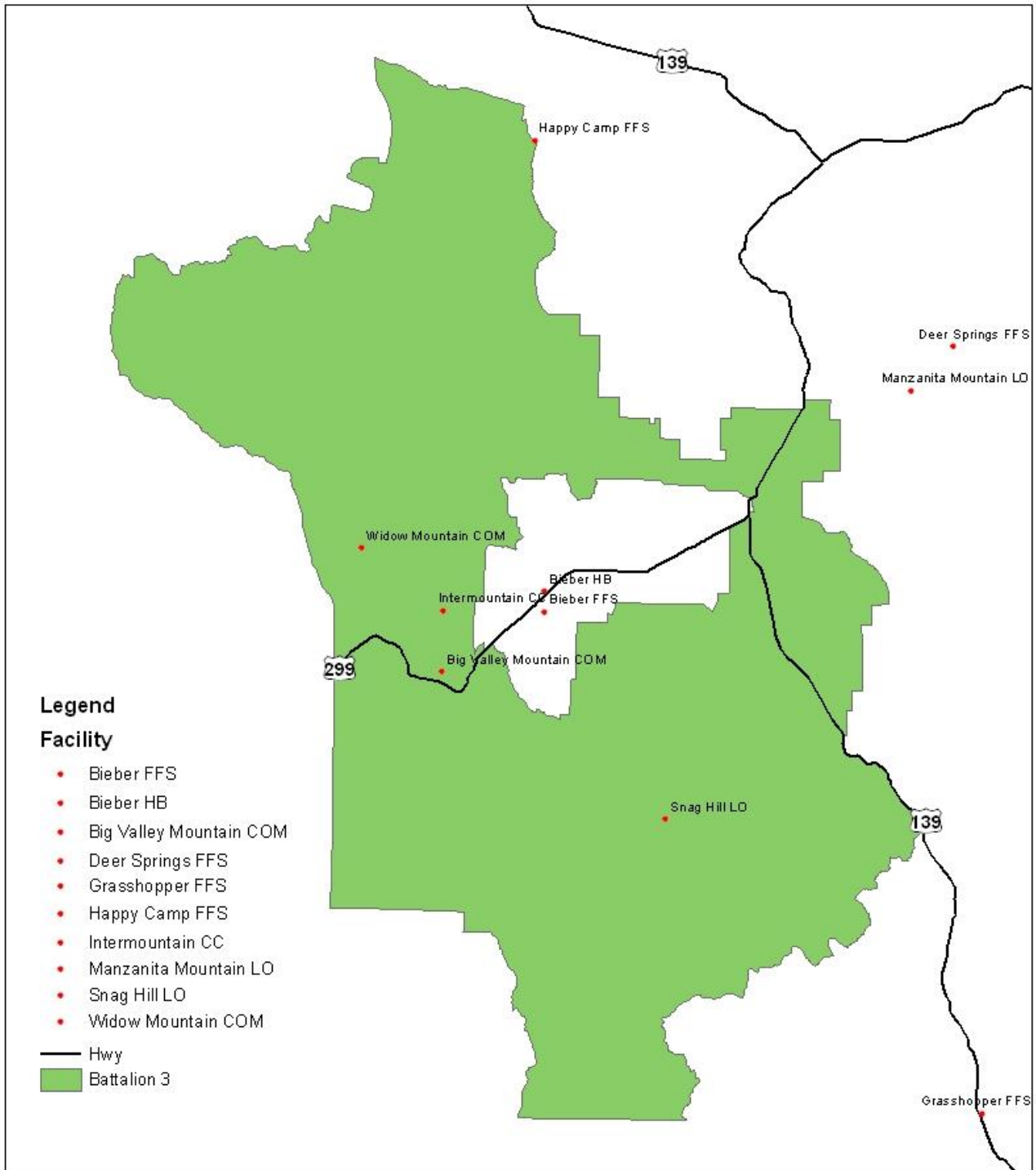
 Battalion 2

 Hwy



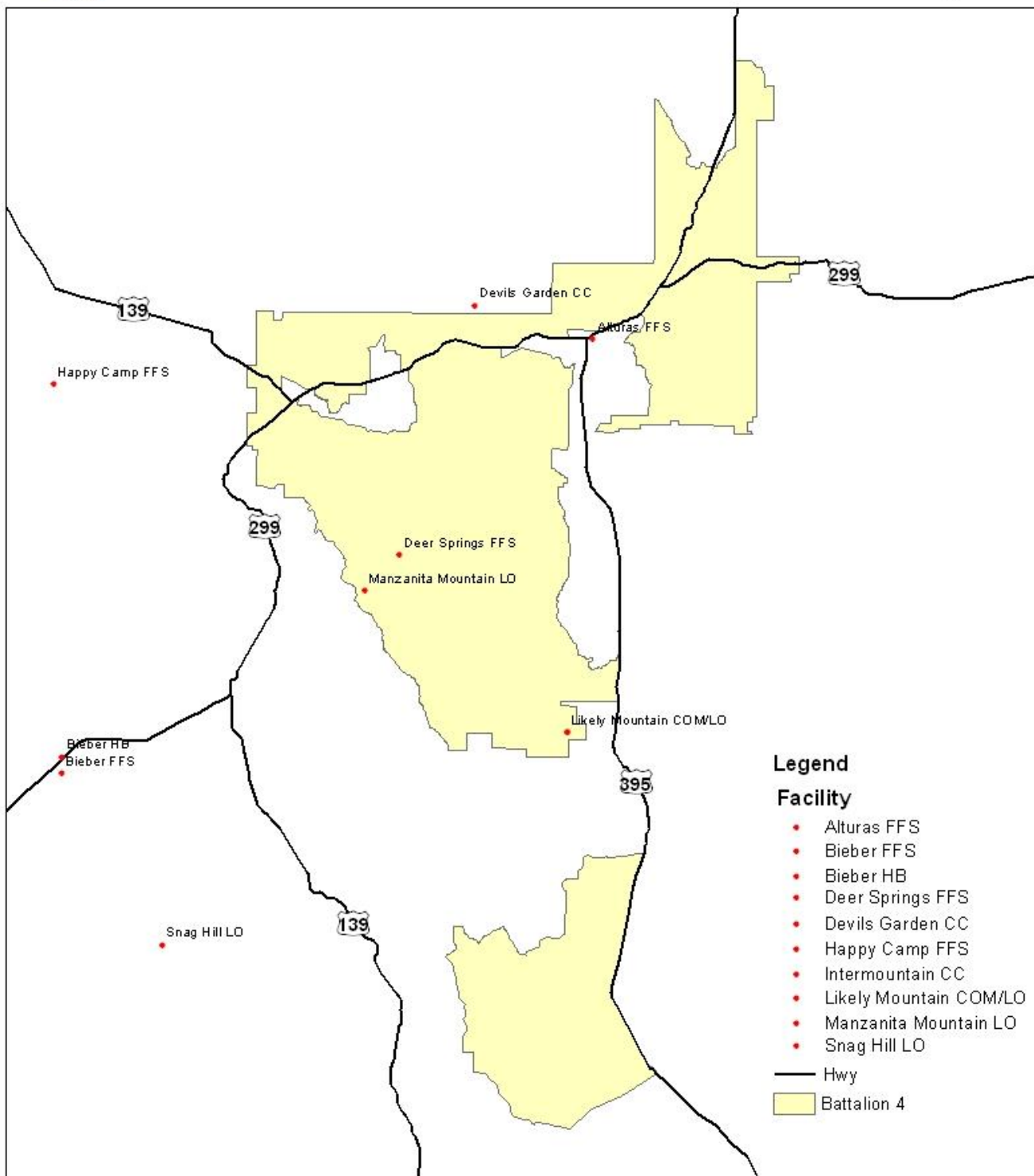


Battalion 3





Battalion 4

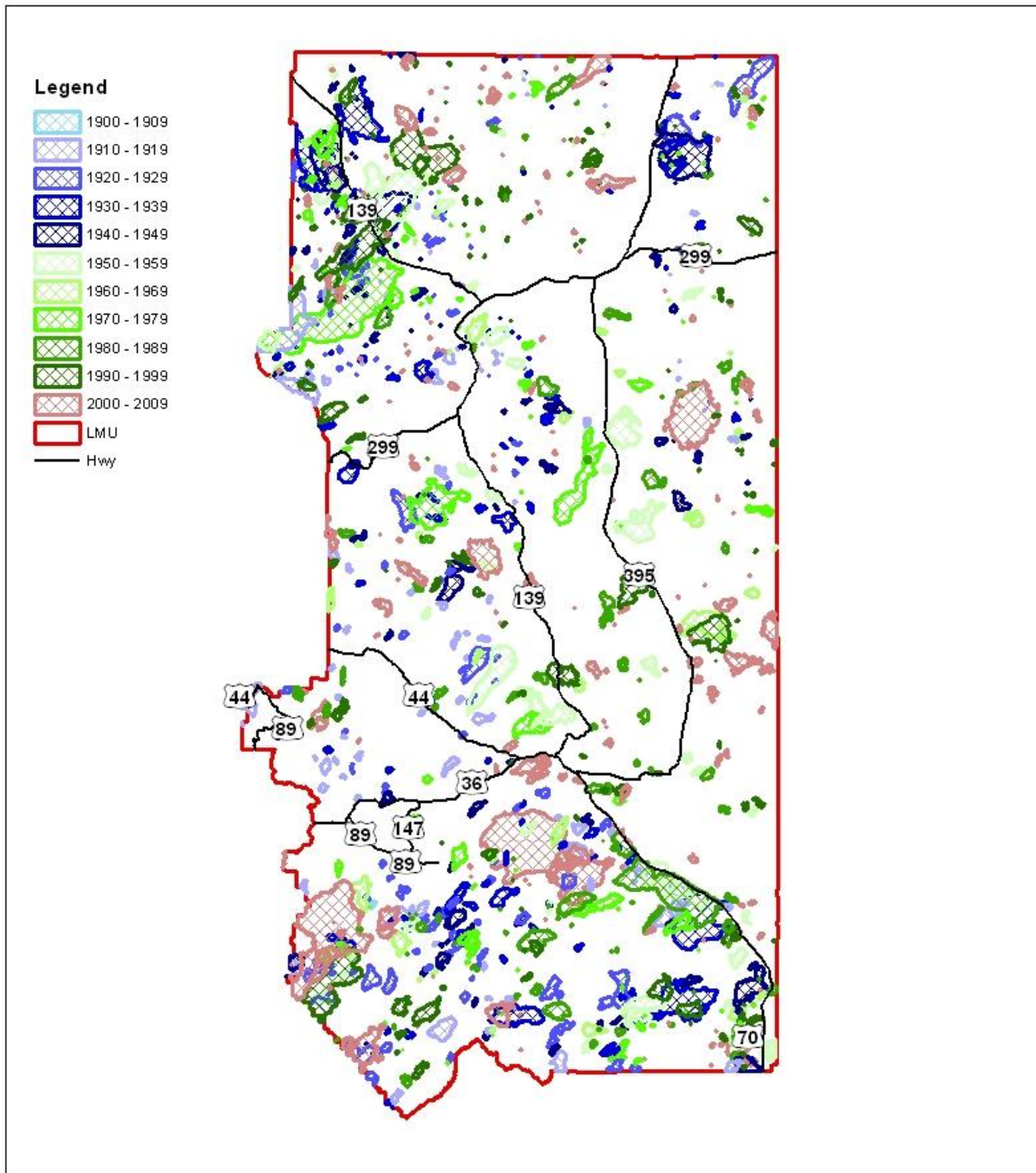
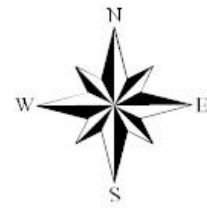


Last update: May 1, 2013

EXHIBITS: FIRE HISTORY MAP



Lassen Modoc Plumas Unit Fire History



SUPPLEMENT: 2013

UNIT ACCOMPLISHMENTS for 2012

Fire Safe Councils

In 2012, Lassen Fire Safe Council continued their work on three fuel treatment projects: Clear Creek, Ash Valley and Kramer Ranch. Approximately 900 acres were treated on these projects with the assistance of Antelope and Intermountain Conservation Camp crews.

Modoc Fire Safe Council was also successful in completing several projects in 2012 with the assistance of crews from Devil's Garden Conservation Camp. These projects included a fuel break in Rush Creek Estates where approximately 100 acres were treated and a fuel break around Modoc Recreational Estates which consisted of over 200 acres.

Fuel Treatment Grant

In 2012, the Unit completed work on four projects funded through the Federal Fuel Treatment Grant. Forty acres of land was treated around the community of Janesville, approximately 25 acres were treated around Ft. Bidwell, 280 acres were treated in the Almanor Basin and a much needed 100 acre fuel break was completed around Intermountain Conservation Camp. All totaled, crews dedicated 763 crew days to these projects, logging over 610,000 hours.

Conservation Camp Program

Crews were busy with conservation work and fire response in 2012; providing assistance to local, state and federal agencies.

- During 2012, Intermountain Conservation Camp provided the local communities with 33,112 hours of project and conservation work. State agencies benefited from 16,592 hours and federal agencies—5,960. The fire season of 2012 saw Intermountain Crews dispatched to 43 incidents and logging over 55,500 hours of fire suppression.
- During 2012, Devil's Garden Conservation Camp provided the local communities with 96,336 hours of project and conservation work. State agencies benefited from 30,216 hours and federal agencies—94,008. The fire season of 2011 saw Devil's Garden Crews dispatched to 32 incidents and logging over 98,800 hours of fire suppression.
- During 2012, Antelope Conservation Camp provided the local communities with 30,608 hours of project and conservation work. State agencies benefited from 17,136 hours and federal agencies—5,152. The fire season of 2012 saw Antelope Crews dispatched to 60 incidents and logging over 83,400 hours of fire suppression.

Susanville Training Center

During 2012, the Susanville Training Center held 93 classes and graduated over 1,300 inmates from the Forestry Fire Training Program. The training center provides highly trained inmates to conservation camps located in the north state. Inmates undergo one week of classroom training and a week of field training, covering wildland fire safety and attack, hand tool use, teamwork, and crew expectations. In addition to receiving education in firefighting and safety, each inmate is trained and evaluated for physical fitness.

Prevention Program

In 2012, Unit staff and Volunteers in Prevention (VIP) provided over 800 hours of fire prevention education, making contact with over 13,000 adults and children through fairs, school programs and other events. Six VIPs joined the program in 2012, bringing the roster to 92. Of the 800 hours dedicated to fire prevention education, over 260 hours were attributed to volunteers.

Fire Suppression

In 2012, Unit resources responded to 937 incidents, including wildland and structure fires, traffic collisions, and medical aids. Firefighters were kept busy in 2012 with state and federal fires that burned in and around the Unit, including the Chips Fire, the Ponderosa, the Barry Point, the Rush, the Reading, the Bagley, the 16, the Likely, the Robbers, and the Mill Fire. These fires burned a total of 623,125 acres of wildland. LMU's only significant fire of 2012 was the Cheney Incident, and it was contained at 230 acres.